

Elementary III Math Objectives

Teacher: Sella Moughalian

Chapter 1 – Place value

Identify and extend whole number patterns to find rules and solve problems.

Solve problems by using strategies make a list and find a pattern.

Represent and write 3-digit numbers using different combinations of hundreds, tens, and ones.

Represent and write 4-digit numbers using different combinations of thousands, hundreds, tens, and ones.

Read and write 4-digit numbers in digit form, expanded form, and word form.

Use models, number lines, and place value to compare and order 3- and 4-digit numbers.

Round 2-, 3-, 4-digit numbers to the nearest ten, hundred, or thousand.

Chapter 2 – Addition and Subtraction

Estimate sums by using compatible numbers and rounding.

Add 3-digit numbers by using the break apart strategy or place value.

Add 4-digit numbers by using the break apart strategy or place value.

Estimate differences by using compatible numbers and rounding.

Subtract 3-digit numbers by using the break apart strategy or place value.

Subtract 4-digit numbers by using the break apart strategy or place value.

Solve problems by using the strategy draw a diagram.

Chapter 5 – Understand Multiplication

Model and skip count objects in equal groups to find how many in all.

Write an addition and a multiplication sentence for a model.

Count by 2s or use doubles to multiply with 2 as a factor.

Draw a picture, use a bar model, or use doubles to multiply with the factor 4.

Use a number line or skip counting to multiply with the factors 5 and 10.

Solve a problem by using draw a diagram strategy.

Use arrays to model products and factors.

Model the commutative property of multiplication and use it to find products.

Model multiplication with the factors 1 and 0.

Chapter 6– Multiplication facts and strategies

Use models or 2s facts and addition to multiply with the factor 3.

Use a number line, doubles, or a multiplication table to multiply with the factor 6.

Use the associative property of multiplication to multiply with three factors.

Use doubles, or a number line to multiply with 8.

Solve problems by using the strategy make a table.

Use addition or subtraction patterns to multiply with the factor 9.

Use known facts to multiply with the factor 7.

Find a rule for a number pattern shown in a function table.

Use an array or a multiplication table to find a missing factor.

Chapter 7 – Understand division

Use models to understand the meaning of partitive (sharing) division.

Use models to understand the meaning of quotative (measurement) division.

Use models to represent division by 2.

Use models to represent division by 5.

Use a number line and repeated subtraction to relate division to subtraction.

Model division by using arrays.

Solve problems by using the strategy act it out.

Use bar models and arrays to relate multiplication and division as inverse operations.

Use multiplication and division fact families.

Use repeated subtraction, a number line, and related facts to divide by 10.

Chapter 8 – Division facts and strategies

Use equal groups, a number line, or a related multiplication fact to divide by 3.

Use an array, equal groups, factors, or a related multiplication fact to divide by 4.

Divide using the rules for 1 and 0.

Use equal groups, a related multiplication fact, or factors to divide by 6.

Use an array, a related multiplication fact, or equal groups to divide by 7.

Use repeated subtraction, a related multiplication fact, or equal groups to divide by 8.

Use equal groups, factors, or a related multiplication fact to divide by 9.

Solve problems by using the strategy act it out.

Use expressions and equations to represent mathematical situations.

Chapter 9 – understand fractions

Explore and identify equal parts of a whole.

Divide models to make equal shares.

Use a fraction to name one part of a whole that is divided into equal parts.

Read, write, and model fractions that represent more than one part of a whole that is divided into equal parts.

Use the terminologies numerator and denominator.

Model. Read, and write fractions greater than 1.

Chapter 11 – Two dimensional shapes and measurement

Identify and describe two dimensional shapes. (point, line, line segment, endpoints...)

Describe and classify angles. (acute, obtuse, and right)

Identify and name polygons by the number of sides they have. (square, rectangle, pentagon, Hexagon, octagon, decagon...)

Measure and draw lines or line segments.

Use units of measurement (centimeter and millimeter) to find the lengths of lines and line segments.

Measure the sides of polygons in cm or mm.

Describe, classify, and draw squares and rectangles.